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No plane is the best one-the volume is!

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No plane is the best one - the volume is!

We thank for your contribution and your interesting thoughts. We certainly agree that our article does not provide a comparison between panoramic radiographs and computerized tomography. However, this was not our intention. The intent was “to describe and estimate the frequencies of anatomic variations of lower third molars in patients with panoramic findings at high risk for IAN injury after surgical removal of the tooth,” as was stated in the introduction section.¹ We obviously agree that we did not state the type of planes utilized for data analysis. This is because we strongly believe that fixed planes of whatever orientation are no longer state-of-the-art for 3D image analysis. The person judging the situation should always have full access to the volume dataset itself and should interactively reconstruct planes as he or she needs for optimal visualization. This, of course, includes transaxial/dental scan planes, if needed. Anything less than that is unacceptable. However, if one has to choose a single reconstruction plane, e.g., for methodical reasons, we have had our best experience with an oblique orientation, as recently described in a more technical paper.²

Regarding the issue of panoramic radiography being the first choice in all wisdom tooth evaluations and the only choice in most of them, we totally agree. As most authors concur, only “high risk” cases require further imaging.³⁻⁵ In fact, this is the reason why only “high risk” cases were evaluated in our study. Others are not of great interest and not available with 3D data. Exceptions are patients who received 3D imaging for reasons aside for situations involving their lower third molars. However, those are difficult to identify in any study design.

In patients for whom panoramic radiography provides insufficient information regarding their lower third molars, we strongly recommend 3D imaging. We do not agree that any conventional technique, such as tube shift, can provide the amount of

information about risk factors necessary for informed consent and safe surgical procedures.⁶ Of course, the additional radiation dose has to be justified by an individual indication and risk assessment.

After all, only a double-blinded randomized study design can reveal whether 3D imaging lowers the risk of inferior alveolar nerve damage (or any other type of surgical complication) in lower third molar removal. However, we believe that this type of study design is probably ethically not acceptable due to the obviously improved information level of 3D imaging combined with the wide availability of Cone Beam Computer Tomography.

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